Grey Bush-Cricket *Platycleis denticulata* (Panzer), which I had not come across since a holiday in Dorset several years previously. Later in the afternoon I found another colony of this species in Purple Moor-grass (*Molinia coerulea*) on a dried-up *Sphagnum* bog half-way down the cliff to the west of Porthgwarra.

A few hundred yards inland was a steep piece of waste land where some ruined cottages had become overgrown with scrubby vegetation (of which Large Bindweed was the most conspicuous element). Here was a vociferous colony of our finest Orthopteron, the Great Green Bush-Cricket *Tettigonia viridissima* L.

But the day drew to its inexorable close, and there was no sign of *Phaneroptera falcata*. Nevertheless, all experienced Orthopterists will know how very local our Bush-Crickets can be, even within an area in which they are plentiful, so perhaps I am entitled to a faint hope that a colony many still persist near some remoteovergrown footpath I failed to reach. Or must we accept, as a recent authority would have, that "the two old records - - - are inadequate - - - for the acceptance of this insect as British"?

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Aggregations of *Agonum dorsale* Pontoppidan (Col. *Agonini*) on Lindisfarne (Holy Island)

By B. R. Benham

Although the gregarious behaviour of *Agonum dorsale* has been reported several times in the past, notably by Southwood, 1963, and Muggleton, 1966, I feel that the large aggregations of this species which were observed on Holy Island are worthy of mention.

While on a bird watching visit to Holy Island on the 1st February 1969, I was walking (South to North) along a path on the extreme Eastern side of the Island within fifty yards of the sea, and could not help but notice the numbers of large stones which had fallen from the dry-stone wall bordering the path. Realizing that the undersides of these would form a suitable habitat for insect life, I proceeded to lift some of these stones, and although several had sunk up to two inches into the soil, on lifting them I was, in many cases, greeted by the rapid dispersal of seemingly countless numbers of the beetle *Agonum dorsale*. The maximum number that I was able to count was fifty plus individuals under one stone which was embedded about one inch into the soil, and about one hundred square inches in area, while numbers from five to forty were recorded under several similar sized stones in the near vicinity. In a few cases single specimens of *Nebria brevicollis* Fabricius (which Linssen refers to as an inland species), were found in the centres of *Agonum* aggregations.

The large size of these aggregations may be due to the fact that there are few suitable overwintering shelters on this exposed Island, and that not only do these stones from the wall form a suitable hide-away (the soil beneath these stones was unfrozen, while that at ground level was quite hard), but the wall itself (the stones being within a yard or two of the

wall) forms an excellent shelter from the extremely violent and cold winds. And I have little doubt that further investigation would have revealed even larger aggregations than those which I have recorded.

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Dasychira fidjiensis M. & V. (Lep., Lymantriidae) biology and wing pattern formation

By Gaden S. Robinson, F.R.E.S.
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Dasychira fidjiensis Mabille and Vuillot (1890): *Novitates Lepidopterologicae*, **1**, *p. 5, pl. 1*: *2.*

D. fidjiensis is a polymorphic Lymantriid endemic to Fiji. It has been collected on the islands of Viti Levu, Vanua Levu (T. H. C. Taylor) and Taveuni (H. S. Evans). On Viti Levu it is a common species, frequently taken at light but preferring to alight on an illuminated wall rather than enter an M.V. trap. The larva has been found on *Psidium littorale* Raddi and *Rhizophora mangle* L. (mangrove). In jungle its foodplant is probably *Crossostylis* spp. It is apparently continuous-brooded. H. S. Robinson and I bred *D. fidjiensis* on *Rhizophora*. The life-history is as follows:

Ovum: 8 days. Spherical, creamy brown, with a black-brown cap, two wide brown bands below the cap, the lower band equatorial.
1st Instar: 5 days.
2nd Instar: 4 days.
3rd Instar: 10 days.
4th Instar: 15 days. At the end of the fourth instar the larva is about 50 mm. long, clothed with fine white hairs with longer black hairs intermingled. There are six orange-brown "shaving brushes" on the back, one per segment. On the penultimate segment there is a black hair-pencil with a white tip.
5th Instar: (females only) 15 days. Larva similar to fourth instar.
Pupa: 14 days. Emergence is usually at about 7.30 p.m.

Because of the staggered emergence of males and females it is difficult to obtain an F2 generation and *fidjiensis* is extremely reluctant to mate in captivity. These factors have hampered investigation of the genetics of the species.

D. fidjiensis is polymorphic; females are larger than the males and fairly consistent in wing patterning but the males exhibit a startling variety of forms. Major variation of the males can be accounted for by the postulated existence of four pairs of alleles or groups of linked alleles. Breeding experiments have so far confirmed this hypothesis and the frequencies of the different patterns of a long series of wild specimens also support it. The major genes affecting wing patterning are as